ABSTRACT

An optical compensation film comprising a cellulose ester film is disclosed. In the film, (a) each of photoelastic coefficient C(md) in a mechanical direction and photoelastic coefficient C(td) in the transverse direction of the cellulose ester film is 1×10^{-9} to 1×10^{-13} Pa^{-1} and C(md) < C(td), (b) retardation R_0 within the plane of the cellulose film defined by Formula (I) is 20 to 70 nm, (c) retardation R_t of the cellulose ester film in a thickness direction, defined by Formula (II) is 70 to 400 nm, and (d) both of a dimensional variation ratio S(md) in the mechanical direction and a dimensional variation ratio S(td) in the transverse direction of the cellulose ester film prior to and after being allowed to stand at ambient conditions of 80 °C and 90 percent relative humidity for 50 hours are -1 to 1 percent, and |S(md)| > |S(td)|.